Dap

Instruction Manual

Valid from Serial No.:
Dap-6: 3880305
Dap-7: 4021449
Dap-V: 4042248

Manual No.: 14027001
(vol. 1 of 4)

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Dap
Safety Precaution Sheet

To be read carefully before use

1. The operator should be fully aware of the use of the machine according to the Instruction Manual.
2. The machine must be placed in an adequate working position.
3. Be sure that the actual voltage corresponds to the voltage stated on the type plate. The machine must be earthed.
4. Be sure that the water connections are without leaks.
5. The main water supply should be turned off if you leave the machine unattended.
6. If you observe malfunctions or hear unusual noises - stop the machine and call technical service.

The equipment is designed for use with consumables supplied by Struers. If subjected to misuse, improper installation, alteration, neglect, accident or improper repair, Struers will accept no responsibility for damage(s) to the user or the equipment.

Dismantling of any part of the equipment, during service or repair, should always be performed by a qualified technician (electromechanical, electronic, mechanical, pneumatic, etc.).

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Instruction Manual

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Always state *Serial No* and *Voltage/frequency* if you have technical questions or when ordering spare parts. You will find the Serial No. and Voltage on the front cover of this manual or on an attached label below. If in doubt consult the rating plate of the machine itself. We may also need the *Date* and *Article No* of the manual. This information is found on the front cover.

The following restrictions should be observed, as violation of the restrictions may cause cancellation of Struers legal obligations:
Instruction Manuals: Struers Instruction Manual may only be used in connection with Struers equipment covered by the Instruction Manual.
Service Manuals: Struers Service Manual may only be used by a trained technician authorised by Struers. The Service Manual may only be used in connection with Struers equipment covered by the Service Manual.

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User's Guide

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1. Getting Started

Checking the Contents of Packing

In the packing box you should find the following parts:

Dap-6

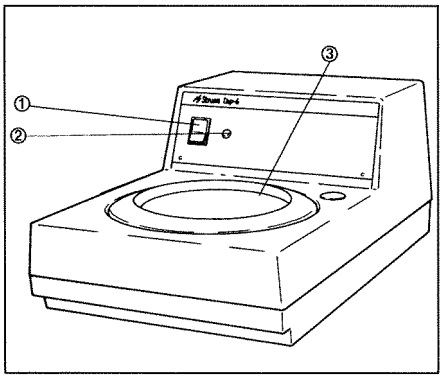
1 Dap-6, complete with inlet hose and cable
1 Lid
1 Splash ring, ø210 mm
1 Splash ring, ø240 mm
1 Outlet hose
1 Elbow pipe
3 Hose clamps, 30 mm
1 Hexagon key, 4 mm
1 Hexagon key, 2.5 mm
1 Instruction Manual

Dap-7 and Dap-V

1 Dap-7 or Dap-V, complete with inlet hose and cable
1 Lid
1 Splash ring, ø210 mm
1 Splash ring, ø240 mm
1 Outlet hose
1 Elbow pipe
3 Hose clamps, 30 mm
1 Hose connection
1 Union nut
1 Gasket
1 Hose clamp, 13 mm
1 Hexagon key, 4 mm
1 Hexagon key, 2.5 mm
1 Instruction Manual

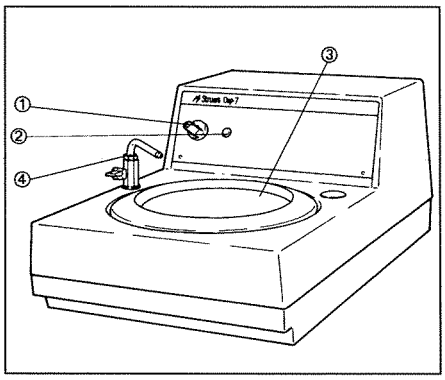
Getting Acquainted with Dap-6/-7/-V

Take a moment to familiarize yourself with the location and names of the Dap components.



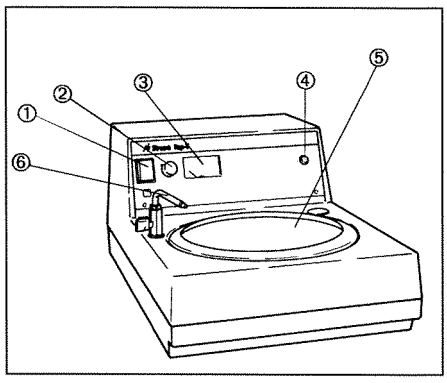
Dap-6

① ON/OFF Switch
② Thermal Cut-out
③ Turntable



Dap-7

① Speed Selector
② Thermal Cut-out
③ Turntable
④ Water Tap



Dap-V

① ON/OFF switch
② Speed Selector
③ Speed Indicator
④ Thermal Cut-out
⑤ Turntable
⑥ Water Tap

Placing Dap

The Dap machines should be placed on a steady table with an adequate working height. The machines must be placed close to the power supply, water mains and water outlet facilities.

Supplying Power

■ Mount a plug on the electric cable and connect it as follows:

Yellow/green: Earth
Blue: Neutral
Brown: Phase
(blue and brown leads are freely interchangeable).

or

Green: Earth
Black: Neutral
White: Phase
(black and white lead are freely interchangeable).

IMPORTANT
Check that the mains voltage corresponds to the voltage stated on the type plate.

Supplying Water (not Dap-6)

Water Inlet

- Connect the inlet hose to the water tap with a hose clamp. The fittings (gasket, union nut and hose connection) supplied with the machine may also be used for the connection.

Water Outlet

- Mount the outlet hose on the back of the machine. The elbow pipe can be used to avoid sharp bends on the outlet hose. Lead the other end of the outlet hose to the drain and be absolutely sure to place the outlet hose with a steady downward slope to prevent the water from being discharged too slowly which may cause overflow or blocking of the water outlet.

Dap-6 is not delivered with a water tap. An optional water tap (DAPTA) is available, see section Accessories.

2. Operation

Mounting the Disc

Place the disc on the turntable and turn it until the three pins engage with the holes in the turntable.

Starting the Machine

Dap-6

Press the ON/OFF switch. The machine starts operating.

Dap-7

Set the adjusting knob to 150 rpm or 300 rpm. The machine starts operating.

Dap-V

Set the speed of disc by turning the adjusting knob to the required speed. Press the ON/OFF switch and the machine starts operating. The speed indicator shows the actual speed of disc.

Stopping the Machine

Dap-6, Dap-V

Press the ON/OFF switch. The machine stops operating.

Dap-7

Set the adjusting knob to zero. The machine stops operating.

Overload

A thermal cut-out is mounted in the Dap machines which switches off the machines in case of overload.

- Press the Thermal Cut-out button to reset the fuse and start the machine.

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1. Accessories

Specification	Code
Wet grinding disc with ring (for non-adhesive grinding paper, The Knuth Rotor Principle)	
ø200 mm	ROTTO
ø230 mm	DEPRO
Polishing disc (PVC for adhesive grinding paper and for polishing)	
ø200 mm	DEPKI
ø250 mm	ROTRO
Water Tap	
To be mounted on Dap-6	DAPTA

Remember...
Struers offers a comprehensive range of consumables for grinding and polishing. Please ask for separate leaflets.

2. Trouble-Shooting

Error	Cause	Action
Outlet hose is blocked	Dirt in the tray or outlet hose	Clean the tray or outlet hose
Transmission inadequate/Disc stops turning	Loose belt. Open Dap according to the description in chapter 3, Maintenance, and check the belt: - If the belt is new - If the belt is worn or damaged	 - Adjust the belt - Replace the belt
Erratic movement	Disc not flat. Bad contact between disc and turntable because of dirt	Clean turntable and disc

3. Maintenance

Daily Service

- Clean all accessible surfaces with a moist cloth.
- When using embedding resins, aluminium oxide polishing etc., the machine should be thoroughly cleaned as e.g. excess resin or oxide can block the outlet hose.

Weekly Service

- Remove the disc and clean off the debris from the tray and outlet hose. Make sure that the contact surfaces between disc and turntable are kept clean.
- In case of heavy use of the machine, this cleaning should be done daily.

> ***Important***
> Never use solvents (i.e. Xylene) of any kind.

Adjusting the Belt

The belt may need adjustment from time to time, the transmission being less efficient with inadequate belt tension:

- Pull out the power supply plug.
- Remove the turntable.
- Unscrew the upper cabinet unit (4 hexagon screws on the underside of the machine).
- Adjust the belt by pushing the motor plate backwards after having loosened the wing nuts. The belt must be adjusted so that a pressure of 100 N in the middle between the pulleys makes the belt bend 10-20 mm.

> ***Remember...***
> to re-install the earth connection.

4. Technical Data

Subject		**Specifications**	
		Metrical/ International	**US**
Disc	Recommended diameter	ø200 mm	8"
	Max. diameter	ø250 mm	10"
	Speed	Dap-6: 250 rpm Dap-7: 125/250 rpm Dap-V: 40-600 rpm	Dap-6: 250 rpm Dap-7: 125/250 rpm Dap-V: 40-600 rpm
	Motor Power	Dap-6: 120W Dap-7: 30/50W Dap-V:180W	Dap-6: 0.16HP Dap-7: 0.04/0.07HP Dap-V:0.24HP
Connected Specimen Mover	For Dap-7/Dap-V: Pedemin-S		
Safety Standard	IEC 204/ EN 60204-1 (VDE 0113)		
Noise Level	Dap-6: 55 dB (A) Dap-7: 55 dB (A) Dap-V 65 dB (A) Measured at idle running, at a distance of 1.0 m/39.4" from the machine.		
Supply	Power	Single phase	
	Voltage, frequency	*Dap-6:* 110-120V, 50-60Hz 220-240V, 50-60Hz *Dap-7:* 110-120V, 50/60Hz 220-240V, 50Hz 200-240V, 60Hz *Dap-V:* 110-120V, 50/60Hz 220-240V, 50/60Hz	
Dimensions and Weight	Width	350 mm	14"
	Depth	590 mm	23"
	Height	245 mm	9.7"
	Weight	Dap-6: 14 kg Dap-7: 16 kg Dap-V: 17 kg	Dap-6: 31 lbs Dap-7: 35 lbs Dap-V: 37 lbs